Algebra I Practice N.RN.B.3: Operations with Radicals 1
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NAME:_____

Simplify:

1. $3\sqrt{5} + 5\sqrt{5} - 3\sqrt{5}$

   [A] $11\sqrt{5}$ [B] $5\sqrt{5}$ [C] $\sqrt{25}$ [D] 25

2. $9\sqrt{3} + 2\sqrt{3} - 2\sqrt{3}$

   [A] $\sqrt{27}$ [B] 27

   [C] $13\sqrt{3}$ [D] $9\sqrt{3}$

3. $7\sqrt{2} + 6\sqrt{2} - 5\sqrt{2}$

   [A] $8\sqrt{2}$ [B] 16

   [C] $\sqrt{16}$ [D] $18\sqrt{2}$

4. $3\sqrt{3} - 3\sqrt{49} + 4\sqrt{48}$

5. $5\sqrt{2} - \sqrt{25} + 3\sqrt{8}$

6. $7\sqrt{6} - 2\sqrt{9} + 2\sqrt{54}$

7. $-8\sqrt{7} - \sqrt{36} - 5\sqrt{63}$

8. $-9\sqrt{5} - 2\sqrt{4} + 9\sqrt{20}$

9. Simplify $\frac{4\sqrt{3} - \sqrt{3}}{6}$.

   [A] $\frac{\sqrt{3}}{2}$ [B] $\frac{2}{3}$ [C] 2

   [D] 6 [E] 0

10. Darin simplified $5\sqrt{5} + 2\sqrt{5}$ and got 15.7. Martha simplified the same expression and got 50. Use a calculator to determine who got the correct answer.

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[1] B

[2] D

[3] A

[4] $19\sqrt{3} - 21$

[5] $11\sqrt{2} - 5$

[6] $13\sqrt{6} - 6$

[7] $-23\sqrt{7} - 6$

[8] $9\sqrt{5} - 4$

[9] A

[10] Darin got the correct answer.